

# Quad Loop Powered Isolator v2 QLPI731

## DESCRIPTION

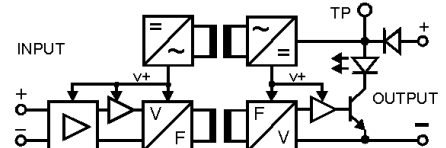
The QLPI731 is a four channel loop powered isolator that combines signal isolation and conversion in one compact package. Standard output is 4 - 20mA with a wide supply range of 7.5 to 38Vdc enabling 12V battery in automotive applications. A wide range of bipolar and unipolar input ranges are available from 200mV to 100V. Double surge protection is standard with all series 700 loop powered transmitters to prevent failure due to spikes induced by DC switched inductive loads. Final calibration is trimmed using internal zero and span trim adjustments. Front mounted LEDs verify the function of each channel.



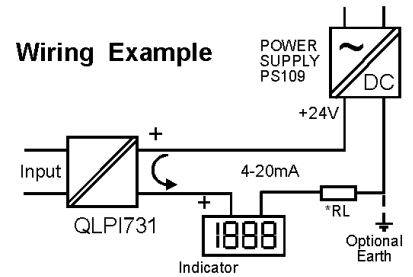
## General Specifications

Mounting:	35mm DIN-Rail.
Termination:	Plug-in screw terminals.
Weight:	0.300 kg.
Protection class:	IP40 (IP65 Enclosure optional.)
Size:	60W x 70H x 110D (mm).
Housing material:	ABS, aluminium.
Calibration accuracy:	<0.2%.
Linearity:	<0.1%.
Long term drift:	<0.10%.
Ambient operating temperature range:	-10...+65°C.
Temperature drift error:	0.01% per °C.
Supply voltage:	7.5 - 38V continuous.
Load for 4 - 20mA output:	$RL_{MAX} = \frac{SupplyVoltage - 7v5}{0.02 A} \Omega$
Load change effect:	0.1% up to RL max.
Response time:	500mS (5mS selected using internal solder pad).
Input impedance:	51Ω (20mA), >1MΩ (1V), >5MΩ (5V), >10MΩ (10V).
Overload continuous: (Zero suppression/elevation)	500% of rated input.
Internal Zero adjustment	±1%
Internal Span adjustment:	±2%
Noise immunity:	130dB CMRR.
Input/output isolation:	>2kV r.m.s.
Electromagnetic compatibility:	AS/NZS 4251.1 (EN 50081.1)

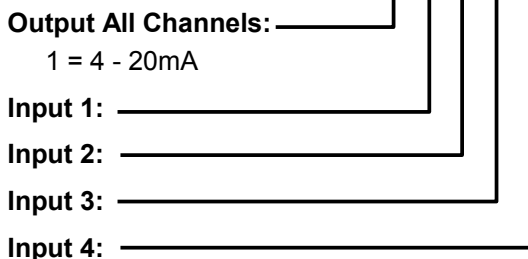
### Block Diagram (one channel)



### Wiring Example



Ordering code: **QLPI731 - X X X X X 0**



### Codes for inputs 1 to 4

- 1 = 4 - 20mA (default)
- 2 = 0 - 20mA
- 3 = 0 - 1V
- 4 = 0 - 5V
- 5 = 1 - 5V
- 6 = 0 - 10V
- \*) 9 = Other unipolar (200mV to 100V max)
- \*) B = -10...+10V
- \*) C = Other bipolar (+/-100mV to +/-100Vdc max)

\*) = Price Extra.

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